




ZANZIBAR PROTECTORATE

Medical and Sanitary Report

for the

Year ended 31st December, 1953



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SECTION I.—ADMINISTRATION: GENERAL REVIEW

STAFF

The establishment of senior Medical Staff for 1953 as sanctioned in the estimates was as follows:—

- One Director of Medical Services.
- One Specialist Officer.
- One Pathologist.
- Seven Medical Officers (including the Medical Officer of Health).
- Three Sub-Assistant Surgeons.
- Five Assistant Medical Officers.
- Two Dental Surgeons.
- One Matron.
- One Sister-Tutor.
- Ten Nursing Sisters.
- One Male Mental Nurse (Superintendent Mental Hospital).
- One Sanitary Superintendent.

Two vacant posts of Medical Officer were filled during the year.

2. Dr. W. G. Jones-Hughes, proceeded on leave in January, and returned in July, when he took over the duties of Medical Officer of Health.

Dr. R. H. Purnell, Specialist Officer, proceeded on leave in April and returned in November.

During his absence Dr. G. T. Balean acted as Specialist Officer.

Dr. R. J. K. Tallack, Medical Officer of Health, proceeded on leave in July.

Dr. L. J. Miller, Medical Officer, arrived on first appointment in August.

Dr. A. J. Cunningham, Medical Officer, arrived on first appointment in October.

Dr. K. D. Young, Medical Officer, who had proceeded on leave in September, 1952, to take the long course for the Diploma of Tuberculosis Diseases at Cardiff returned in December, 1953.

Dr. D. W. Beckett, Medical Officer, proceeded on leave in December.

Miss M. E. Murphy, Nursing Sister, arrived on first appointment in August.

Miss A. Beecroft, Matron, proceeded on leave in May and returned in December.

During her absence Miss M. M. F. Cooke, Nursing Sister, acted as Matron.

Miss M. Rowlinson, Nursing Sister, proceeded on leave in February, and returned in August.

Miss W. Tighe, Nursing Sister, proceeded on leave prior to transfer to Uganda in February.

Miss V. E. M. Allen, Sister-Tutor, proceeded on leave in July.

Miss L. F. Taylor was appointed as Nursing Sister on contract in July.

The award of the British Empire Medal to Mr. Suleiman Mussa, Rural Dispensary Attendant, is recorded with pleasure.

The death in April, of Mr. Mtumwa Zaid, Laboratory Assistant is recorded with regret.

The loyal co-operation during the year of all members of the department is gratefully acknowledged.

TRAINING OF STAFF

3. (a) Dr. K. D. Young was successful in obtaining the Tuberculosis Diseases Diploma at Cardiff thanks to the World Health Organisation Fellowship awarded to him in 1952.

Dr. R. J. K. Tallack was also awarded a World Health Organisation Fellowship and started the course leading to the Diploma of Public Health at the London School of Hygiene and Tropical Medicine.

A locally recruited student was also sent to take a three years' course in Radiography in Bristol at the suggestion of Dr. J. H. Middlemiss, Nuffield Consultant in Radiology, while visiting the Protectorate.

One Assistant Medical Officer qualified at Makerere College during the year and is now doing his two years compulsory internship in Dar es Salaam.

(b) With the co-operation of the Tanganyika Government, five learner Sanitary Inspectors were sent to the Health Training School, Kongwa, at the beginning of 1953 to start the three years' course for the Sanitary Inspectors Diploma of the Royal Sanitary Institute.

This was the first year of the scheme for sending Zanzibar students for training to Tanganyika and it must be stated that they have not all come up to expectations.

One student resigned early in the course, and his place was taken by another student who thus started late and was at some disadvantage for this reason. The results of the first year's work were disappointing. Out of a class of twenty, Zanzibar students occupied 6th, 19th and 20th places.

It is proposed to send five more students in 1954.

(c) The training of nursing staff continued throughout the year although the Sister-Tutor was on leave for much of the time.

In December seventeen candidates sat the final examination for which Tanganyika kindly sent an external examiner. Eleven passed, three were referred for further training and three failed and were discharged.

This was encouraging after the results in 1952.

DISTINGUISHED VISITORS

4. Visitors to the Protectorate during 1953 included the following:—

Dr. Alan Mozley, D.Sc., Ph.D., F.R.S. (E).

Dr. J. H. Middlemiss, Director of Radiology, United Bristol Hospitals.

Miss J. McLarty—Nursing Consultant, World Health Organisation.

Dr. Lloyd Rusby, M.A., D.M., F.R.C.P., Nuffield Consultant in Chest Diseases.

Sir Clutha Mackenzie, British Empire Society for the Blind.

Dr. H. Richards, O.B.E., Director of Medical Services, Sudan.

Mr. J. H. Peel, M.A., B.M., F.R.C.S., F.R.C.O.G., Nuffield Consultant in Obstetrics and Gynæcology.

The help and advice given on these visits is much appreciated.

HOSPITALS

5. The new hospital in Zanzibar is almost completed, but it will not be possible to occupy it until the A.C. supply of electricity is forthcoming, probably towards the end of 1954. Most of the equipment has now been ordered and the total cost works out at less than £1,000 per bed.

6. There has been a steady increase in the work of the hospitals in Zanzibar and Pemba during recent years. The number of in-patients during 1953 was 6,881 compared with 6,160 in 1952.

DISPENSARIES

7. The work of the rural dispensaries continued and expanded. These are sited to serve the major centres of population in the two islands as follows:—

Zanzibar

Kizimbani	Mwera
Makunduchi	Mkokotoni
Kizimkazi	Selem
Chwaka	Jambiani
Bweleo	

Pemba

Mzambaraoni	Fufuni
Kinazini	Ole
Konde	Ziwani
Kengeja	

Sites for two new dispensaries were chosen at Chongwa and Ukutini Shambani in Pemba and tenders were called for during the year. Work also started on re-building Kengeja dispensary by the villagers themselves with assistance from Government.

The number of patients treated in dispensaries was:—

New cases	...	49,889
Re-attendances	...	80,990

MATERNITY AND CHILD WELFARE

8. These services were maintained. There were 962 confinements in Government hospitals compared with 854 in 1952 (shown in tables on pages 27–29). The Makunduchi Rural Health Unit is proving successful. It is staffed by two midwives and visited weekly by a Nursing Sister. During 1953, 160 women were confined.

RAHA LEO CLINIC

9. In the Ngambo area of Zanzibar town the need for medical attention for school girls and for the female and infant population had long been realised and a dispensary named Raha Leo Clinic was opened on 13th July, 1953. This is situated at the Civic Centre and occupies a permanent building of good design. It has proved popular and successful and relieves the hospital of female out-patients.

The staff consists of one full-time lady doctor, one female trained nurse and one hospital ayah.

From its inception to the end of the year the attendance at this clinic was 3,503.

SCHOOL MEDICAL AND DENTAL SERVICES

10. The Assistant Medical Officer in charge of the School Medical Services continued to carry out school inspections during the year. Medical inspection was also carried out at three grant-aided schools. The total number of children inspected was 977. At the end of each inspection day the cards were handed over to the Headmasters so that the pupils could receive any necessary attention as soon as possible. All children who required medical and surgical treatment were referred to the hospital.

In Pemba as a result of the clove harvest the schools were empty or nearly empty for a large part of the year and the usual examination of school children was therefore impracticable.

The School Dental Service was continued both in Zanzibar and Pemba.

SECTION II.—PUBLIC HEALTH

1. RETURNS

11. The total number of patients seen at hospitals and dispensaries during the last five years was as follows:—

		1949	1950	1951	1952	1953
New cases	...	127,816	133,216	130,522	143,090	146,168
In-patients	...	6,228	6,011	6,533	6,160	6,881
Total Attendances	...	454,236	304,687	305,597	332,075	254,800
Deaths in Hospital	...	376	318	357	370	372

The principal causes of death in hospitals were:—

1. Respiratory tuberculosis	...	...	...	...	...	...	26
2. Malaria	...	...	...	...	...	...	20
3. Other infectious and parasitic diseases	...	...	...	...	...	...	33
4. New growths	...	...	...	...	...	...	10
5. Anaemias	...	...	...	...	...	...	23
6. Diseases of nervous system	...	...	...	...	...	...	19
7. Circulatory diseases	...	...	...	...	...	...	30
8. Respiratory diseases (excluding tuberculosis)	...	...	...	...	...	...	52
9. Alimentary diseases including intestinal obstruction	...	...	...	...	...	...	46
10. Diseases of genito-urinary system	...	...	...	...	...	...	21
11. Diseases of pregnancy and puerperium	...	...	...	...	...	...	21
12. Injuries	...	...	...	...	...	...	27

2. COMMUNICABLE DISEASES

A.—Insect-borne

12. *Malaria*.—8,075 cases were notified during the year and of these 555 were treated as in-patients. There were twenty deaths. The figures for 1952 were 8,647 cases including 499 in-patients and twenty-four deaths.

13. *Blackwater Fever*.—There were six cases during 1953 with two deaths.

14. *Plague*.—There has been no case of this disease for many years, but the Health Department continues the systematic trapping of rats in order to ascertain whether plague is present among the rat population. Daily tests made by the Laboratory proved negative for plague bacilli.

During the year 6,408 rats were trapped giving an average of one rat per house trapped. Traps were set on 177,814 occasions giving a result of 3.55 rats trapped per 100 traps.

15. *Relapsing Fever*.—There were no cases during the year.

16. *Yellow Fever*.—No case of Yellow Fever was detected during the year. The *Aedes* Index in urban areas remains low.

As a result of a survey of blood sera carried out in 1952, application was made to the World Health Organisation to include Zanzibar Protectorate in the Yellow Fever Endemic Zone, and the validity of inoculation certificates was extended from four to six years.

B.—Infectious Diseases

17. The following table is a comparison of the infectious diseases notified by the Protectorate hospitals for the past five years:—

	1949	1950	1951	1952	1953
Chicken pox ...	421	131	53	80	75
Diphtheria ...	4	—	1	2	—
Dysentery-Amoebic ...	83	89	49	38	41
Dysentery-Bacillary ...	14	34	79	10	9
Erysipelas ...	1	—	1	1	2
German Measles ...	—	1	—	—	—
Leprosy ...	20	12	22	17	21
Measles ...	37	6	112	61	44
Mumps ...	40	34	49	535	35
Puerperal Fever ...	—	14	8	5	1
Poliomyelitis ...	—	1	—	1	3
Paratyphoid Fever ...	—	—	—	—	1
Relapsing Fever ...	2	1	—	—	—
Small-pox ...	—	—	—	1*	—
Tetanus ...	2	—	—	—	—
Tuberculosis ...	168	135	125	106	143
Typhus Fever ...	—	—	—	—	—
Typhoid Fever ...	12	11	10	5	1
Whooping Cough ...	59	45	16	51	35

*One imported case from India.

The Rural dispensaries do not notify their cases and their figures are not included in this table.

18. *Small-pox*.—There were no cases reported in the Protectorate although the disease occurred in the neighbouring mainland territories.

Vaccinations were carried out at the Health Office. There were numerous passengers arriving by dhow and other boats from the adjacent territories who were not in possession of valid certificates and in all such cases vaccination was insisted upon.

Passengers arriving on ships and planes have their health documents inspected and those without valid vaccination certificates are vaccinated.

The following vaccinations were performed during the year:—

Zanzibar ...	21,473
Pemba ...	2,402
	<hr/>
	23,875
	<hr/>

19. *Tuberculosis*.—Institutional treatment of known cases is carried out at the Zenubbai Karimjee Hospital, Dole, at the General Hospital and, to a lesser extent, at the Walezo Institution.

The total number of beds in use was about eighty, most being filled nearly all the time.

All cases are first admitted to the general hospital for investigations that are impossible to carry out at the Dole Sanatorium. When these investigations are complete, cases that are considered to have a reasonable chance of benefitting from treatment are sent to Dole. They have to return to town from time to time for further X-ray examinations.

A number of cases too advanced for treatment were also sent to the tuberculosis ward at Walezo.

During the year sixty-seven patients were admitted to the Dole Sanatorium for treatment and fifty-two patients were discharged. The number of deaths recorded was three. Six patients left without permission.

In all 416 cases attended government hospitals. Admissions numbered 208 and there were twenty-six deaths.

There were 143 new cases of tuberculosis notified in Zanzibar and forty-two in Pemba. Of Zanzibar cases, ninety-one were from the Zanzibar township and fifty-two from the rural districts.

Clinics were held once a week at the General Hospital in town at which refills were given and old cases seen.

The number of cases attending this clinic was as follows and the treatment given is also shown:—

	<i>Pneumo- Artificial Collapse</i>							
	<i>peritonenum</i>	<i>Pneumo-</i>	<i>Therapy</i>	<i>thorax</i>			<i>Total</i>	
Males	... 21	... 4	... 44	...	...	...	69	
Females	... 7	... —	... 26	...	...	...	33	
Total	... 28	4	70				102	

Close liaison between the Health Office and the Tuberculosis Unit was maintained during the year, including the following up of known cases and collection of contacts for examination.

The District Sanitary Inspectors in Zanzibar township regularly visited all cases in their areas at monthly intervals to ascertain the condition of the patients and any changes of domicile and to ensure that preventive measures were being carried out. Disinfectant was issued for the treatment of infected sputum.

Family contacts of the patients were medically examined for the detection of early infections and the local Welfare Society was informed of all cases to enable their staff to render any assistance found necessary on investigation.

The contacts of notified cases were also brought to the hospital by the Sanitary Inspector. They were examined and X-rayed.

A total of 337 contacts were seen; of these twenty-five were kept under observation for some time but only three were found to require active treatment. This figure is very much lower than would be expected and needs investigation before being accepted as an indication of the incidence of active disease amongst contacts of open cases at a given time.

The nucleus of a tuberculosis service has now been firmly established in Zanzibar; its facilities are used by private practitioners, by Government medical officers, and by the general public.

20. *Leprosy*.—The Leper Settlements at Walezo (Zanzibar) and Makondeni (Pemba) were maintained as in previous years. The number of patients treated at the two settlements were as follows:—

Walezo

Remaining on 31st December, 1952	...	...	60
Admitted during 1953	...	...	28
Discharged during 1953	...	...	10
Died during 1953	...	...	5
Remaining on 31st December, 1953	...	...	73

The management of the Walezo Leper Settlement was in the hands of the Roman Catholic Mission and there are now forty-three huts for patients. Those who are capable of working are employed by the Mission and paid an appropriate wage.

During the year two new stone houses for lepers were erected. With these two new ones the Walezo Leprosarium has now been provided with five stone houses which accommodate twenty patients.

The administration of diaminodiphenyl sulphone and dried yeast was continued at doses up to 300 milligram daily with a break of seven days every lunar month, and thirty grains of yeast daily. It was observed that a reduction of the dose of sulphone in some cases was necessary in order to avoid reaction and anaemia.

During the year, inspection showed signs of arrest of the disease in twenty cases, most of which were of the tuberculoid type. It is hoped that the next inspection in 1954 will confirm the good results obtained.

Makondeni (Pemba)

Remaining on 31st December, 1952	...	...	71
Admitted during 1953	...	...	20
Discharged during 1953	...	...	6
Died during 1953	...	...	3
Remaining on 31st December, 1953	...	...	82

The local staff remained unchanged from 1952. Accommodation in the settlement has been increased by six rooms built by the patients themselves during 1953. There is now accommodation for 104 patients and at present there are eighty-two patients in residence.

The administration of the settlement and the physical welfare of the patients have been respectively under the care of the District Medical Officer, Pemba, and a layworker provided by the British Empire Leprosy Relief Association. With his help a great deal has been done to alleviate the condition of the patients. Some of these are employed on menial work in the settlement and are paid from public funds.

During the season, a large area of land was also cultivated by the lepers and a good crop of rice, cassava and sweet potatoes was grown. This extra food was used to augment the patients' rations, and the whole scheme proved to be so popular that it is expected that an even larger area will be put under cultivation next year. The co-operation of the Provincial Administration was generously given whenever necessary, in the form of prisoners, to do the heavy work of clearing the bush before ploughing.

The British Empire Leprosy Relief Association layworker has completed his survey of lepers in Pemba Island and has formed the opinion that there is now less than one-third of the number of lepers estimated by Dr. Ross-Innes, East Africa Inter-territorial Leprologist, who visited the island two years ago.

Three two-roomed houses were built during the year. Accommodation is now considered to be sufficient and no further extension will be needed.

About 90 per cent of the patients were on sulphone treatment. This year is the first time in the history of Makondeni that a patient has been discharged as the result of treatment.

The District Medical Officer visits the colony at least once a week. All patients are seen in rotation as a routine and any cases requiring extra attention are examined whenever necessary.

21. *Excremental Diseases*.—One case of typhoid and one of paratyphoid were notified. Forty-one cases of amoebic dysentery and nine of bacillary dysentery were also notified. Hookworm disease appears no less prevalent than usual.

22. *Schistosomiasis*.—This continues to be detected as a sporadic infection, especially among school children and prisoners. Treatment is given when necessary and efforts made to eradicate vector snails.

VITAL STATISTICS

23. The Medical Officer of Health has continued to act as Registrar of Births and Deaths for Zanzibar town and the recipient of quarterly vital statistics from rural areas. The system of collection of these figures is primitive and the results correspondingly unreliable.

Estimated population of Zanzibar and Pemba at					
the end of 1952	...	...	...	...	270,784
Add births	...	...	...	3,791	
Add immigrants	...	...	...	45,108	48,899
					<hr/>
Total					319,683
Deduct deaths	...	...	...	2,233	
Deduct emigrants	...	...	...	39,442	41,675
					<hr/>
Estimated population at end of 1953	...	...	...	...	278,008
					<hr/>

24. *Births and Deaths*.—2,108 births and 1,247 deaths were recorded in Zanzibar and 1,683 births and 986 deaths in Pemba.

The birth rate worked out at fourteen per thousand and the death rate at 8·2 per thousand.

25. *Infant Mortality*.—Sixty-four deaths of children under one year were registered. The infantile mortality rate was seventeen per thousand live-births.

26. *Still-births*.—Fifty-three still-births were registered. The still-birth rate was 13·7 per thousand births.

SECTION III.—HYGIENE AND SANITATION

27. During 1953 as in previous years, the following measures have been carried out to reduce the prevalence of mosquitoes:—

- (a) Routine anti-malarial control by clearing of plots and open land, oiling, filling, draining, etc., was carried out over the town area every day. Town refuse is being used to raise the level of a large swamp at Ziwani by controlled dumping.
- (b) Over 11,000 houses and huts in the town were inspected once a week in order to eliminate the breeding places of mosquitoes. Details of these inspections, results and action taken are entered on daily report forms by the Sanitary Orderlies employed. To discourage slackness and maintain high standards of inspection, inspectors visit all areas to check the work. By this method sixteen breeding places that had been overlooked by the orderlies were discovered.
- (c) Formerly water connections were made to premises without due regard to drainage facilities, with the result that many mosquito breeding places were found. All new water connections are now referred to the Health Department for recommendation before the connections are made. During the year 168 new water connections were dealt with involving the prior construction of new sullage pits, trapped gullies and sinks and drainage of approved types.
- (d) In order to ascertain the effectiveness of methods used to destroy the mosquito in the larval stage, special control stations in the township were visited daily for adult mosquito catching. Other control stations were selected in all the sanitary Districts of the Town, and weekly visits made to them for the same purpose. In addition, regular inspections and collections of adult mosquitoes were made in the cells of the Zanzibar Prison.
- (e) The control of the Culicine mosquitoes is the most difficult problem and although efforts are made to reduce the breeding in the numerous pit latrines in town by oiling, the problem will remain until gradually the conversion of pit latrines to the water-flushed system eliminates the breeding places.
- (f) The area surrounding the airport at Kisauni has been regularly inspected, and control measures maintained.
- (g) In accordance with suggestions made by the Director of the East African Malaria Unit, adult mosquito catches were made in three rural districts in Zanzibar throughout the year, as a guide to future policy in this matter.

(h) A protective belt extending to a depth of one mile outside the Zanzibar Township boundaries, and running from north to south, was regularly kept under control in order to reduce the number of adult mosquitoes entering the town. Houses situated in a portion of this belt nearest to the town boundaries were sprayed with D.D.T. Results are shown in the tables below:—

Breeding Places Found

				Zanzibar township	Protective belt outside township
Anopheles	...	...	...	52	55
Aedes	...	...	...	226	116
Culex	...	...	...	241	215

Adult Mosquitoes caught in Control Stations

				Zanzibar township	Protective belt outside township
Anopheles	...	...	...	—	16
Aedes	...	...	...	2	34
Culex	...	...	...	2,702	427
Aedes Index (per cent)	...	...	...	0.04	0.4

LICENSED PREMISES

28. All licensed premises were inspected before the issue of new licences. The co-operation of the Municipal Officer has been of great assistance in carrying out this important work.

Although seventy-eight eating-houses, forty-seven houses-let-as-lodgings, thirty-six laundries, twelve bake-houses, eleven dairies, and five aerated-water factories and shops were inspected, notices were issued when the premises were found to be below the standard required by law.

FACTORIES

29. District Sanitary Inspectors carried out their duties as Inspectors of Factories under the Factories (Supervision and Safety) Decree, 1943, and regularly visited the premises.

GENERAL MEASURES OF SANITATION

(a) *Sewage Disposal and Drainage Improvements in Private Houses*

30. Slow but gradual progress has been made in converting insanitary pit-latrines into water-flushed closets.

During the year sixty-seven tanks were constructed by private owners, and 151 water-flushed closet pans installed. Five thousand, and sixty-three feet of 4-inch glazed earthenware drain pipes were laid, and 1,388 feet of 4-inch iron soil pipes and 878 feet of 3-inch iron waste pipes were fixed.

In addition the Public Works Department have laid 540 feet of 4-inch drain pipes.

This has enabled forty-nine cesspits and fourteen sullage-pits to be abolished and filled in.

(b) Scavenging and Refuse Disposal

In order to facilitate the collection of refuse in the native location of the town, empty drums were placed in various areas but, as many of these were removed by the residents for other purposes, the drums are now being punctured to prevent such thefts.

Street cleaning has been carried out as in former years. Difficulties were experienced in the latter part of the year due to shortage of labour, which had been attracted to Pemba by the high wages paid there for clove-picking.

During the year 107,451 cart-loads of refuse were removed from six sanitary districts of Zanzibar township, as compared with 110,282 in 1952.

With the exception of refuse burnt at the refuse-destructor, refuse was used for raising the level of low-lying areas by controlled dumping. It was disposed of as follows:—

Hollis Road dump	...	...	4,465	cartloads
Saateni dump	...	...	30,680	„
Saateni refuse-destructor	...	...	1,140	„
Ziwani dump	...	...	71,166	„
				<hr/>
				107,451 cartloads
				<hr/>

(c) Control of flies

Locally made fly traps were placed on fixed sites in all areas and baited daily. A fly-searcher is also employed in Zanzibar township to destroy any breeding places which may be found.

Number of fly traps used—

Zanzibar Town	...	...	54
Zanzibar Rural Districts	...	...	29
Pemba	...	...	28

Number of fly-breeding places detected — 85.

(d) Control of rats

Although plague has not appeared in Zanzibar for a very long period, rat control is exercised by systematic trapping in all districts in the Zanzibar township. Daily reports are made by the rat trappers which gave details of the premises where rat traps were set and of the species of rats caught. All rats are inspected at the Health Office and slides of spleen smears were prepared for examination for *B. Pestis* by the Medical Department Laboratory.

In approving plans submitted to the Joint Building Authority an endeavour is made to ensure that all new food stores are adequately rat-proofed.

A summary of the results of trapping rats during the year is shown below:—

Total number of traps set	...	...	...	117,814
Total of rats caught	...	...	...	6,408
Number of slides taken	...	...	...	2,727
Total of houses trapped	...	...	...	55,739
Average of rats per house trapped	...	...	...	.10
Number of rats trapped per 100 traps	...	...	...	3.55%
Species: <i>Rattus</i>	...	...	...	6,364
Other rodents, mice, shrews, etc.	...	...	...	44

HOUSING AND TOWN-PLANNING: ZANZIBAR TOWNSHIP

31. *Building Authority*.—The building authorities are constituted as follows:—

Stone Town	-	District Engineer. Medical Officer of Health.
Ngambo (Native Location)	-	District Commissioner (Urban). Medical Officer of Health.

The volume of work remained very heavy throughout the year and, although its importance is appreciated, it is making such demands on the time of sanitary inspectors that their other work has to suffer.

The Building Appeals Advisory Board, dealing with appeals against decisions of the Ngambo building authority, meets regularly. In the majority of cases the building authority's decisions were upheld.

One thousand, six hundred and seventy-three applications in the Ngambo area were made. Of these thirty-six were the subject of appeal and in only ten cases was the appeal allowed after submission by the Appeal Board to the British Resident.

32. Inspections and recommendations were made in connection with the following applications made to the Joint Building Authority:—

Stone Buildings

<i>Applications with plans:</i>	1949	1950	1951	1952	1953
Erection of new buildings ...	23	26	14	28	29
Major alterations and additions including drainage to existing buildings ...	115	100	115	125	178
<i>Applications without plans:</i>					
Alterations and additions ...	266	257	260	261	288
Permits refused ...	4	5	12	8	10
Notices served for unauthorised works ...	23	14	12	22	27
Notices served for dangerous structures ...	190	116	111	124	114

Native-type Buildings

Applications for erection of new huts ...	137	170	296	181	341
Applications for reconstruction and extension of existing huts ...	245	227	281	345	115
Applications for repairs to existing huts ...	1,306	1,420	1,680	1,245	1,217
Notices served for stoppage of unauthorised works ...	34	54	61	69	22
Notices served for demolition ...	6	10	4	5	4

Ruinous or insanitary huts demolished

					1949	1950	1951	1952	1953
Stone Town ...	...	...	...	...	23	—	—	1	4
Ngambo ...	...	...	...	...	80	25	16	35	33

In addition to the work involved in checking the plans on the sites during consideration of applications, the District Sanitary Inspectors kept the buildings under observation during construction. Although these regular inspections interfere considerably with other routine duties the work is essential in the interest of general sanitation and improvement of housing.

ZANZIBAR TOWNSHIP COUNCIL

33. The Medical Officer of Health remained an official member of the Council and Chairman of its Public Health Committee. No sanitary services were taken over by the Council in 1953.

TOWN-PLANNING

34. During the year another visit was paid by the Kenya Town-Planning Adviser, Mr. Thornley-Dyer, and later his assistant, Mr. Andrassy, visited Zanzibar.

Layouts were produced for new building estates on land not yet built over and these are still under discussion.

FOODSTUFFS IN RELATION TO HEALTH AND DISEASE

35. All licensed premises dealing with food, such as eating-houses, bake-houses, milk shops and markets were regularly inspected and the necessary improvements effected where necessary. Fifty-eight notices were served in connection with these premises.

Licensed hawkers of food were kept under strict observation and all their utensils had to be approved and stamped by the Health Office staff before use. This work involved the checking of 201 hawkers.

Two hundred and nine samples of milk were taken for chemical analysis. Of these 101 were from town dairies and 108 from milk vendors from the rural districts. In addition, lactometer tests were carried out at the milk depôt, where milk brought from the rural areas is presented for inspection and the sealing of milk cans before sale.

The following table gives details of the samples analysed and of the action taken:—

			<i>Town dairies</i>		<i>Milk vendors</i>
			1953		1953
Samples of milk taken	...	...	101	...	108
Samples found adulterated	...	...	9	...	26
Average fat per sample	...	...	4.31%	...	4.93%
Average non-fatty solids per sample			8.83%	...	8.60%
Average of water per sample	...	...	0.23%	...	2.21%
Warning notices for milk found adulterated with water 4 per cent	...	...	7	...	7
Prosecutions instituted for milk found below legal standard	...	...	2	...	15
Convictions obtained	...	...	2	...	15

The following is the list of some of the foodstuffs found unfit for human consumption and condemned during 1953:—

				lb.
Fresh fruits	...	...	...	2,838
Meat	...	...	...	1,525
Vegetables	...	...	...	6,151
Fish	...	...	...	885
Rice	...	...	...	41,520
Onions	...	...	...	15,488
Potatoes	...	...	...	7,190
Biscuits	...	...	...	240
Wheat grain	...	...	...	4,055
Sugar	...	...	...	1,000
Wheat flour	...	...	...	150
Homogenized Baby Food	...	...	...	41½

RURAL SANITATION: ZANZIBAR ISLAND

36. Three trained Sanitary Inspectors were on duty during the year in the following rural districts:—

Makunduchi.
Chwaka.
Mkokotoni.

They regularly visited the villages in their areas and instituted various measures for the improvement of sanitation and public health.

Mosquito Control

During the inspections a careful search was made for mosquito breeding places, with the following results:—

			<i>Anopheles</i>		<i>Culex</i>		<i>Aedes</i>
Makunduchi	...	...	17	...	34	...	12
Chwaka	...	...	9	...	69	...	—
Mkokotoni	...	...	1	...	13	...	12

The usual preventive measures were carried out including the maintaining of larvæ-eating fish (*Gambusia* sp.) in large tanks, wells, etc.

Control stations for the collection of adult mosquitoes were arranged in various villages and monthly records were kept of catches made.

Water-Supply

During the year a new water-supply from the Kipange stream to Mkokotoni and Donge villages was constructed by the Public Works Department. This involved the provision of new storage tanks, water-mains and pumps.

All existing wells and tanks were kept under close supervision, and arrangements made for clearance of thick vegetation from the surroundings, for cleaning the wells and water receptacles, and for the repair of broken parapet walls.

Milk Supply

Milk collected in the areas for despatch to Zanzibar was regularly tested by lactometer and such tests have resulted in a considerable improvement in the quality of milk.

Dead Animals

Eight dead animals were found decomposing in various areas and arrangements for their disposal were made.

Infectious Diseases

All notified cases were investigated and detailed reports made. In cases of tuberculosis and leprosy, arrangements were made to send the patients and contacts to the Zanzibar Hospital for examination and necessary treatment.

Vaccination against small-pox was carried out in some of the rural schools.

Swamps

Various swamps were kept under constant observation for mosquito breeding and the snail hosts of schistosoma. In January Dr. Alan Mozley whilst on a visit to Zanzibar inspected a former large swamp at Mbuyuni which had been drained and dried out as a result of previous recommendations made by him.

Six swamps containing snail hosts of schistosoma were treated with copper sulphate three times during the year.

Housing

Sanitary Inspectors gave valuable advice to the villagers on the construction of houses and particularly the provision of good pit latrines.

The erection of huts on a planned layout continued at Chwaka under the general supervision of the Sanitary Inspector.

Eating-houses, Markets and Food stores

All premises were regularly inspected, and instructions given regarding the cleansing of utensils and floors and the protection of food from contamination by flies, dust, etc.

Refuse Disposal

In Chwaka and Mkokotoni villages the refuse is collected by local sweepers and taken to refuse dumps or compost beds.

The refuse from the remaining smaller villages is disposed of by crude tipping into pits and on the seashore. By constant propaganda the villagers are being induced to collect the refuse in heaps to be destroyed by burning where no controlled dumping or compost beds can be properly arranged and supervised.

Fly Control

The standard wooden and wire gauze fly traps were distributed in all areas, and arrangements were made for the baiting and cleansing of them. All fly-breeding places found were satisfactorily dealt with.

Rat Reduction

Rat traps were issued to the villagers when required and they reported the catches when returning the traps.

The number of rats caught during the year was as follows:—

Makunduchi District	...	347
Chwaka District	...	90
Mkokotoni District	...	137

Health Education

During their visits the Sanitary Inspectors gave lectures to the villagers on rural sanitation.

PEMBA

PUBLIC HEALTH IN PEMBA

37. There are Health Offices in the towns of Wete, Chake Chake and Mkoani and also at Konde Village. There was a Sanitary Inspector stationed at Chake Chake and Mkoani throughout the year and at Wete from January to March and from July to the end of the year.

There has been a Sanitary Inspector stationed at Konde since October, and this officer comes into Wete twice a week to assist the Sanitary Inspector there.

Each station except Konde has a sanitation staff. At Konde there is a gang of three labourers who are paid by the Provincial Administration and are loaned to the Health Office.

The villagers of Kengeja and Mtambili each have a small sanitation staff and are under the care of the Sanitary Inspector, Mkoani, who visits them at regular intervals.

Services performed by Health Office, during 1953

					Wete		Chake-Chake		Mkoani
<i>Anti-malarial work on Swamps:</i>									
Bush cleared (sq. yds)	...	...	...	...	263,275	...	20,919	...	50,905
Trees planted	...	...	...	...	—	...	—	...	500
<i>Mosquito catches:</i>									
Anopheles	...	...	...	...	73	...	692	...	61
Aedes	...	...	...	...	456	...	882	...	59
Culex	...	...	...	...	3,262	...	1,216	...	124
<i>Mosquito Breeding places found:</i>									
Anopheles	...	...	...	...	31	...	—	...	24
Aedes	...	...	...	...	41	...	—	...	27
Culex	...	...	...	...	619	...	—	...	73
<i>Spraying of Buildings:</i>									
Quarters	...	...	...	...	21	...	9	...	1
Offices and hospital wards	...	...	...	...	21	...	5	...	—
<i>General Health:</i>									
Crab holes filled	...	...	...	...	32,845	...	603	...	2,705
Sullage pits oiled	...	...	...	...	4,137	...	5,620	...	1,777
Pools oiled	...	...	...	...	464	...	2,889	...	340
Anti-malarial drains oiled	...	...	...	...	—	...	—	...	—
Latrine pits oiled	...	...	...	...	2,417	...	5,024	...	2,293

<i>Prosecutions:</i>				<i>Wete</i>	<i>Chake</i>	<i>Mkoani</i>	<i>Konde</i>
Successful	...	...	...	35	16	8	—
Unsuccessful	...	...	...	2	1	—	—
Withdrawn	...	...	...	—	2	—	—
<i>Sewage Disposal:</i>							
Earthenware pipes laid (feet)	...	...	...	467	1	36	—
W.C. installed	...	...	...	2	—	—	—
Septic tanks constructed	...	...	...	8	—	—	—
Septic tanks and latrine pits emptied	...	...	...	18	—	37	—
Sullage pits dug	...	...	...	45	1	61	—
<i>Scavenging:</i>							
Cartloads of refuse removed	...	...	...	15,473	2,183	1,639	1,470
<i>Bush clearing:</i>							
Bush cleared (sq. yds)	...	...	...	346,879	20,919	—	212,312
<i>Destruction of vermin:</i>							
Rats destroyed	...	...	...	1,908	1,541	1,107	484
<i>Animals slaughtered:</i>							
Bulls	...	...	...	872	560	103	160
Cows	...	...	...	12	36	28	47
Sheep	...	...	...	211	78	—	—
Goats	...	...	...	658	435	146	29

Immigration

Native vessels arriving at Wete from the Mainland	...	161
Passengers disembarking therefrom	...	870

Immunisation against Yellow Fever

During the year 185 persons were inoculated against Yellow Fever.

Immunisation against Typhoid

Eight persons were inoculated with T.A.B. Vaccine.

Immunisation against Cholera

Fifteen persons were inoculated against Cholera.

Inspection of Foodstuffs

The following were condemned:—

Onions	...	...	600 lb.
Fish	...	...	632 „
Meat	...	...	235½ „
Vegetables and Fruit	...	...	150 „
Maize	...	...	6 bags
Milk	...	...	125 gallons

Housing

The following is a summary of the work done:

Total number of building applications	...	536
Applications to build huts	...	304
Applications to build stone buildings	...	24
Applications to repair huts	...	200
Applications to repair stone buildings	...	8
Demolitions ordered	...	28

The above table of services rendered by the Health Offices in Pemba does not take into account, two occurrences which added enormously to the already heavy burden carried by the Sanitary Services. The first of these was the unusually heavy clove crop which resulted in an increase in dirt, promiscuous defaecation and spread of disease. A side effect of the clove harvest was the acute shortage of labour already referred to above which was so bad that, at one time, the sanitation staff were all down to less than half strength and that of Mkoani to quarter strength.

The second occurrence was the exceptionally long and heavy masika rains which caused the storm-water drains to fill with sand and overflow as fast as, if not faster than, the Health Officers were able to clear them. Very large pools were present in the towns for months at a time and bred many mosquitoes. Oiling these was a waste of time as the oil was washed away during the next shower. The swamps were under water for a long time and getting them under control again was not an easy task.

Ambulance Service

The ambulance has given good service throughout the year. It has been necessary to use it for the transport of stores and rations to Makondeni Leper Settlement, the transport of heavy boxes of medical supplies and equipment from Wete Customs Shed to Wete and Chake Chake Hospitals, the transport of officers' luggage on transfer from one station to another and the transport of firewood from Makondeni Prison Camp to Wete Hospital in addition to its proper function of transporting patients. As a result of all this, the condition of the vehicle is not satisfactory.

A new pick-up vehicle was received in Pemba at the end of the year and this will take a great deal of the strain off the ambulance in future.

Pemba Health Advisory Committee

The Pemba Health Advisory Committee was revived during 1953 after having been in abeyance since 1947; three meetings were held.

The Committee did a good deal of valuable work and gave the District Medical Officer much help in some of his problems.

Joint Building Authority, Pemba

The Joint Building Authority controls construction, alterations, and repairs of all buildings in any town in Pemba.

It is composed of the District Commissioner, the Assistant Engineer and the District Medical Officer and the latter is the executive officer of the authority.

Meetings were held regularly at fortnightly intervals except when there was no business to transact.

SECTION IV.—PORT AND AERODROME HEALTH WORK

38. The Medical Officer of Health has continued to be responsible for these services and detailed figures are given later. A tribute must be paid to the sterling work of the Health Inspectors concerned in this work. Their courtesy and punctuality have been admirable.

The following is an indication of the work of those sections during 1953:—

Port

Ships which called	...	...	521
Dhows which called	...	...	1,886
Persons who arrived by sea	...	...	32,279
Persons who left by sea	...	...	26,590

Aerodrome

Aircraft which landed	...	...	1,693
Persons who arrived by air	...	...	12,829
Persons who left by air	...	...	12,852

During the course of the careful checking of all health documents, the following passengers were found to have arrived either without the necessary vaccination and yellow fever certificates, or their certificates had expired or were otherwise invalid.

Ship passengers	...	273
Air passengers	...	183

Quarantine Station

During the year extensive repairs to buildings were carried out on Changuu Island. As the Mshihiri ward latrine had collapsed a new latrine was built. The Punjabi ward and isolation ward and latrine were also repaired.

The large underground water storage tank in the old jail was thoroughly cleansed, and all the defective portions of the wooden frame work covering the tank were renewed.

New furniture was also supplied to the bungalows.

The routine clearing of bush, filling of depressions, levelling of roads, etc., were performed.

During the year no person was placed in quarantine.

SECTION V.—MATERNITY AND CHILD WELFARE

39. Ante-natal and infant welfare clinics were held regularly in Zanzibar at the Maternity Hospital and in the Rural Districts of Zanzibar at Makunduchi, Mkokotoni, Mwera and Selem. They were also held in Pemba at Wete and Chake Chake.

Figures of attendances during the past four years are shown in the following two tables.

An analysis of the midwifery done at the three hospitals in the Protectorate and at the Rural Health Unit, Makunduchi, is shown in the third table.

SECTION V.—MATERNITY AND CHILD WELFARE

MATERNITY AND CHILD WELFARE

	1949		1950		1951		1952		1953	
	New cases	Re- attendances	New cases	Re- attendances	New cases	Re- attendances	New cases	Re- attendances	New cases	Re- attendances
General cases	11,712	36,769	11,733	31,527	13,591	41,865	14,044	50,365	16,761	38,039
Ante-natal	423	1,151	441	1,368	428	1,201	529	1,307	547	1,499
Infant Welfare	362	790	393	448	156	1,173	273	1,347	235	749
Total	12,497	38,710	12,567	33,343	14,175	44,239	14,846	53,019	17,543	40,287
<i>Zanzibar Rural Clinics:</i>										
Mkokotoni	1,327	4,079	1,215	3,856	1,389	2,768	1,639	2,868	1,502	2,335
Mwera	742	2,410	269	627	227	654	355	966	227	323
Selem	236	693	302	326	406	772	200	787	312	562
Total	2,305	7,182	1,786	4,809	2,022	4,194	2,194	4,621	2,041	3,220
<i>Zanzibar Maternity Hospital:</i>										
Total confinements...	353		399		374		431		482	
<i>Makunduchi Maternity Home:</i>										
Total confinements	...		61		89		133		160	
Ante-natal	...	...	106	245	204	673	233	621	243	793
Infant Welfare	...	...	201	...	521	...	463	...	653	...
Total	...	...	307	245	725	673	696	621	896	793

Pemba—Wete Clinic:

Ante-natal cases	...	131	509	154	448	225	583	233	681	287	636
Infant Welfare	...	65	160	77	304	154	239	184	307	211	224
Total	...	196	669	231	752	379	822	417	988	498	860

Pemba—Chake Chake Clinic:

Out-patients	...	4,116	8,639	3,750	8,659	4,520	6,286	4,527	6,748	4,347	8,046
Ante-natal cases	...	70	256	140	315	111	290	132	239	157	318
Infant Welfare	...	139	651	248	766	570	878	260	780	224	694
Total	...	4,325	9,546	4,138	9,740	5,201	7,454	4,919	7,767	4,728	9,058

Wete Maternity Hospital:

Total confinements...	95	88	147	217	210
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Chake Chake Hospital:

Total confinements...	42	56	43	73	103
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ANALYSIS OF MATERNITY CASES

Maternity Hospital, Zanzibar

Total confinements	482
Maternal deaths	...	...	...	5
Infant deaths	...	...	...	6
Still births	...	...	...	27
Premature births	...	...	...	11
Caesarian section	...	...	...	5
Forceps deliveries	...	...	...	20

Maternity Hospital, Makunduchi

Total confinements	...	...	...	160
Complicated cases transferred to hospital				8

Wete

Total confinements	...	...	...	210
Maternal deaths	...	...	...	4
Infant deaths	...	...	...	9
Still births	...	...	...	12
Premature births	...	...	...	14
Caesarian section	...	...	...	5
Forceps deliveries	...	...	...	14

Chake Chake

Total confinements	...	...	...	112
Maternal deaths	...	...	...	2
Infant deaths	...	...	...	2
Still births	...	...	...	10
Premature births	...	...	...	—
Caesarian section	...	...	...	—
Forceps deliveries	...	...	...	6

SECTION VI.—REPORT ON SPECIAL DEPARTMENTS

EYE CLINIC

40. The work of the Eye Clinic still expands but the limiting factor is lack of accommodation.

The Pathologist was in charge of the Eye Clinic during the year. The following are the figures for cases treated:—

New cases	...	...	...	...	3,659
Re-attendances	...	...	...	...	14,040
Vision testing (candidates for Government employment and school boys for scholarships)	...	...	...	...	522
					<hr/> 18,221 <hr/>
Refraction for glasses	...	...	...		68
Operations major	...	...	...		79
Operations minor	...	...	...		39
Cases admitted to hospital		...	...		102

SURGERY

41. The following operations were performed at the Zanzibar Hospital during the year:—

*Major Operations**Abdominal operations:*

Herniotomy	...	.....	...	...	115
Strangulated hernia	...	...	...	...	58
Appendicectomy	...	...	...	...	5
Appendix Abscess	...	...	...	...	7
Castro-enterostomy	...	...	...	...	1
Laparotomies	...	...	...	...	6

Genito-Urinary:

Hydroceles radical cures	...	...	...	...	64
Urethrotomies	...	...	...	...	3
Amputation of Scrotum	...	...	...	...	8
Orchidectomy	...	...	...	...	3
Supra-public drainage of bladder	...	...	...	...	22
Supra-public Prostatectomy	...	...	...	...	3
Supra-public Lithotomy	...	...	...	...	4
Other G.U.	...	...	...	...	5

Gynaecological:

Hysterectomy	...	...	...	...	31
Ovariectomy	...	...	...	...	5
Other Abdominal	...	...	...	...	3
Dilatation and Curettage	...	...	...	...	10
Retained placenta	...	...	...	...	2
Caesarian Section	...	...	...	...	3
Perineal operation	...	...	...	...	1

Ear, Nose and Throat:

Tonsillectomy	...	...	...	...	3
Other	...	...	...	...	2

Eye Operations 68*Rectal operations:*

Haemorrhoidectomy	...	...	...	...	3
Fissures	...	...	...	...	4
Fistulae	...	...	...	...	3
Other	...	...	...	...	1

Fractures, operative:

Skull	...	...	...	...	1
Arms	...	...	...	...	4
Legs	...	...	...	...	6

Amputations:

Arms	...	...	...	...	1
Legs	...	...	...	...	3

Other procedures:

Mastectomy	...	...	...	...	1
Phrenic avulsion	...	...	...	...	2
Miscellaneous	...	...	...	...	57
Injuries	...	...	...	...	3

Minor proceedings:

Incision of abscesses	...	...	...	161
Injuries of soft tissues	...	...	...	12
Fractures	...	...	...	112
Genito-urinary (sounds catheters, etc.)				325
Miscellaneous	...	...	...	92
				<hr/> 702 <hr/>

Out-Patient Theatre:

Incision of abscesses	...	...	...	350
Tapping of hydroceles	...	...	...	117
Soft tissue injury repairs				62
Unclassified	...	...	...	18
				<hr/> 547 <hr/>

LABORATORY, ZANZIBAR

42. The total number of examinations performed in Zanzibar was 38,041 and in Pemba 11,100.

The Laboratory work is summarised briefly as follows:—

Parasitological examinations	...	...	...	19,676
Bacteriological examinations	...	...	...	7,357
Serological examinations	...	...	...	2,540
Histological examinations	...	...	...	15
Medico-legal examinations	...	...	...	16
Post-mortem examinations	...	...	...	13
General (blood biochemical etc.)	...	...	...	8,247
Special (Aschheim-Zondek, Veterinary etc.)				117
				<hr/> 38,041 <hr/>

Malaria

There was a considerable increase of positive blood films over those of 1951 and 1952. The comparative figures are:—

	1951	1952	1953
P. Falciparum	1,580	891	1,804
P. Vivax	188	154	275
P. Malariae	8	5	4
Undefined plasmodiae	75	135	191
	<hr/> 1,851 <hr/>	<hr/> 1,185 <hr/>	<hr/> 2,274 <hr/>

The demand from the hospital for crude liver extract, five per cent dextrose solution and normal sterile saline continued. The figures in litres supplied are as follows:—

	1951	1952	1953
Crude liver extract	173	175	113
5 per cent Dextrose Solution	106	202	199
Normal Saline	182	263	198

Sterilisation of dressing drums for the hospital, preparation of sterile solutions for the Eye Clinic and the making of dilutions of old Tuberculin "T" for the T.B. Clinic continued as in previous years.

LABORATORY, PEMBA

	<i>Wete</i>		<i>Chake</i>		<i>Mkoani</i>
Parasitological examinations ...	4,052	...	3,240	...	20
Bacteriological examinations ...	677	...	100	...	—
Serological examinations ...	448	...	133	...	—
Medico-legal examinations ...	—	...	—	...	—
General (blood biochemical etc.)	2,430	...	—	...	—
	<hr/> 7,597	...	<hr/> 3,483	...	<hr/> 20

DENTAL SERVICE

43. Visits to Pemba covered sixty-eight days and the dental services were continued throughout the year.

The following is a summary of the main work carried out by the Department during the year. It does not include patients treated while in hospital for fractured jaws, etc.

	<i>Attendances</i>	<i>Extractions</i>	<i>Fillings</i>	<i>Scalings</i>
Schools ...	2,043	278	2,128	10
Out-patient clinics ...	8,481	2,675	—	—
Other patients ...	2,214	415	767	154

MENTAL HOSPITAL

44. No new building was undertaken at the Mental Hospital. Ninety feet of wall were raised three feet to prevent escapes. The position of two taps was also altered for the same reason.

There is still urgent need for extra accommodation for male patients.

A wireless set was provided from the Nakuru Hospital Sweepstake Gift Fund, also footballs and playing cards, which have been greatly appreciated by the patients.

Very little planting was done during the year. The soil of the grounds is very poor and it is a struggle to keep going any trees that are planted in spite of regular mulching and manuring.

Staff

A qualified female nurse and a qualified hospital attendant were appointed to the Mental Hospital bringing the total qualified nursing staff up to four male and one female. This has meant improved nursing attention for the patients, but there is still need for more qualified staff to bring the nursing attention up to the desired standard.

The following figures show the number of patients treated:—

Remaining on 31st December, 1952	...	149
Admitted during 1953	...	83
Discharged during 1953	...	64
Deaths during 1953	...	12
Remaining on 31st December, 1953	...	156

Electro-convulsive therapy was started in November and the staff were trained in its use. Barbiturates are used as sedatives when necessary, but no anaesthesia is used and does not appear to be necessary as a routine procedure.

Twenty-seven patients were started on courses of treatment, but in the cases of three males treatment had to be discontinued.

At present it is too early to state the results of the treatment but there is noticeable improvement in most of the cases treated, particularly in early cases. Old standing cases appear to improve and then remain static or regress.

WALEZO INSTITUTION

45. This institution, which is under the control of the Roman Catholic Mission, has accommodation for (a) the old and infirm (b) tuberculosis patients (c) leprosy patients.

The following figures show the work done during 1953:—

Poor House

Number remaining on 31st December, 1952	147
Admitted	87
Discharged	29
Died	53
Number remaining on 31st December, 1953	152

Tuberculosis Ward

Number remaining on 31st December, 1952	6
Admitted	45
Discharged	17
Died	14
Number remaining on 31st December, 1953	20

Leper Settlement

Number remaining on 31st December, 1952	60
Admitted	28
Discharged	10
Died	5
Number remaining on 31st December, 1953	73

PRISONS

46. *Central Prison, Zanzibar.*—186 prisoners were admitted as in-patients to the Prison Infirmary during the year and 954 new cases were seen as out-patients. Total attendances numbered 6,972.

Eleven cases of malaria and six cases of venereal disease were treated. Twenty-one cases transferred to the Government Hospital.

The daily average on the sick list was nineteen.

Rural Dispensary attendants at Kizimbani and Selem are in charge of Kinu-cha-Moshi, Langoni, and Kichwele Prison Camps respectively. These are visited once weekly by the Medical Officer in Charge Prisons.

SECTION VII.—FINANCE

47. (a) *Expenditure, Health Department*

						£
Personal Emoluments	...	...	...	...	...	77,655
Other Charges:						
General Stores	...	...	...	...	...	4,053
Drugs, Medical Stores and Equipment				...	...	21,969
Maintenance of Patients	...	...	...	...	...	22,419
Sanitation Labour	...	...	...	...	...	3,071
Miscellaneous Services		...	...	...	...	18,200
						<hr/> 147,367 <hr/>

(b) *Expenditure Municipality*

						£
Personal Emoluments	...	...	...	...	...	3,900
Other Charges:						
Equipment and Stores		...	...	...	...	117
Sanitation Labour	...	...	...	...	...	11,250
						<hr/> 15,267 <hr/>

(c) *Revenue*

						£
Hospital fees and sale of drugs	...	...	...	...	...	6,609
Dental fees	...	...	...	...	...	570
Contribution from dependencies towards quarantine station	...	...	...	...	...	1,462
						<hr/> 8,641 <hr/>

SECTION VIII.—LEGISLATION AFFECTING THE PUBLIC HEALTH
ENACTED DURING THE YEAR

Government Notice No. 3.—The Births and Deaths Registration (Amendment) Decree, 1953.

Government Notice No. 4.—The Medical Practitioners (Notification of Deaths) Decree, Repeal Decree, 1953.

Government Notice No. 44.—The Births and Deaths Registration Rules, 1953.

Government Notice No. 45.—The Births and Deaths Registration Decree, 1951, (Appointment of Registrar of Births and Deaths for the town of Zanzibar).

Government Notice No. 111.—Public Health (Appointment of Cemeteries (Amendment) Order, 1953).

Government Notice No. 29.—The Penicillin Decree, 1948 (Declaration of other substances).

RETURN OF DISEASES: IN-PATIENTS, 1953

Code	List No.	Diseases	Remaining in Hospital at end of Dec. 1952	Total cases	Deaths	Remaining in Hospital at end of Dec. 1953
<i>General Infectious and Parasitic Diseases</i>						
001,008	A 1	Respiratory Tuberculosis ...	27	208	26	36
010	A 2	Tuberculosis of Meninges and Central Nervous System ...	—	6	4	—
011	A 3	Tuberculosis of Intestines, Peritoneum and Mesenteric Glands ...	—	—	—	—
012,013	A 4	Tuberculosis of bones and joints	—	6	1	1
014.09	A 5	Tuberculosis—all other forms ...	—	8	2	—
020	A 6	Congenital Syphilis ...	—	7	1	—
021.0.021.1	A 7	Primary Syphilis ...	—	9	—	—
021,2-021,4	A 7	Secondary Syphilis ...	—	3	—	—
024	A 8	Tabes Dorsalis ...	—	—	—	—
025	A 9	General Paralysis of Insane ...	—	3	—	—
022,023	A 10	Cardio Vascular Syphilis ...	—	—	—	—
026-029	A 10	All other Syphilis ...	—	3	2	—
030,031	A 11	Gonorrhoea, Genito-urinary ...	—	62	—	—
033	A 11	Gonococcal infection of eye ...	—	—	—	—
032,034,035	A 11	Other Gonococcal infections ...	—	31	—	1
040	A 12	Typhoid Fever ...	—	2	—	—
041,042	A 13	Salmonella Infections ...	—	1	—	—
043	A 14	Cholera ...	—	—	—	—
044	A 15	Brucellosis ...	—	1	—	—
045	A 16	Bacillary Dysentery ...	—	59	—	1
046	A 16	Amoebiasis ...	1	74	—	2
047,048	A 16	Other Unspecified Dysentery ...	2	5	—	—
050	A 17	Scarlet Fever ...	—	—	—	—
051	A 18	Streptococcal Sore Throat ...	—	6	—	—
052	A 19	Erysipelas ...	—	—	—	—
053	A 20	Septicaemia and Pyaemia ...	—	—	—	—
055	A 21	Diphtheria ...	—	—	—	—
056	A 22	Whooping Cough ...	—	1	—	—
057	A 23	Meningococcal Infections ...	—	—	—	—
058	A 24	Plague ...	—	—	—	—
060	A 25	Leprosy ...	132	54	11	152
061	A 26	Tetanus ...	—	6	4	—
062	A 27	Anthrax ...	—	8	1	—
080	A 28	Acute Poliomyelitis ...	—	1	—	—
082	A 29	Acute infectious Encephalitis ...	—	—	—	—
081,083	A 30	Late Effects Poliomyelitis and Infectious Encephalitis ...	—	—	—	—
084	A 31	Variola major ...	—	—	—	—
084	A 31	Variola minor ...	—	1	—	—
085	A 32	Measles ...	1	4	1	1
091	A 33	Yellow Fever ...	—	—	—	—
092	A 34	Infectious Hepatitis ...	1	15	3	1
094	A 35	Rabies ...	—	—	—	—
100	A 36	Louse-borne Epidemic Typhus ...	—	—	—	—
101	A 36	Flea-borne Endemic Typhus ...	—	—	—	—
104	A 36	Tick-borne Typhus ...	—	—	—	—
N.O.S.						
102-108	A 36	Other Rickettsial Diseases ...	—	—	—	—
110	A 37	B.T. Malaria ...	—	79	2	—
111	A 37	Qt. Malaria ...	—	26	—	—
112	A 37	S.T. Malaria ...	—	279	7	5
Carried forward ...			164	968	65	200

Code	List No.	Diseases	Remaining in Hospital at end of Dec. 1952	Total cases	Deaths	Remaining in Hospital at end of Dec. 1953
		Brought forward ...	164	968	65	200
115 N.O.S.	A 37	Blackwater Fever ...	—	6	2	—
113-117	A 37	Other Forms of Malaria ...	3	165	9	—
123.0	A 38	Schistosomiasis (haematobium) ...	—	21	—	—
123.1	A 38	Schistosomiasis (mansoni) ...	—	9	—	—
123.2	A 38	Schistosomiasis (japonicum) ...	—	—	—	—
123.3	A 38	Other Unspecified Schistosomiasis	—	1	—	—
125	A 39	Hydatid Diseases ...	—	—	—	—
127	A 40	Onchocerciasis ...	—	—	—	—
127	A 40	Loiasis ...	—	—	—	—
127	A 40	Filariasis (bancrofti) ...	1	56	2	3
127	A 40	Other Filariasis ...	—	6	—	—
129	A 41	Ankylostomiasis ...	1	25	—	—
126	A 42	Tapeworm and other cestode in- festation ...	—	—	—	—
130.0	A 42	Ascariasis ...	—	3	1	—
130.3 N.O.S.	A 42	Guineaworm ...	—	—	—	—
124-130	A 42	Other diseases due to Helminths	—	2	—	—
037	A 43	Lymphogranuloma Venereum ...	—	4	—	—
038	A 43	Granuloma Inguinale ...	—	3	—	—
039	A 43	Other Unspecified Venereal Diseases	—	8	—	—
049	A 43	Food Poisoning, infective and toxic (excepting Salmonella in- fections) ...	—	—	—	—
071	A 43	Relapsing Fever ...	—	—	—	—
072	A 43	Weil's Diseases ...	—	—	—	—
073	A 43	Yaws ...	2	49	—	1
087	A 43	Chicken-pox ...	9	53	—	1
090	A 43	Dengue ...	—	—	—	—
095	A 43	Trachoma ...	—	3	—	—
096.7	A 43	Sandfly fever ...	—	—	—	—
120	A 43	Leishmaniasis ...	—	—	—	—
121.0	A 43	Trypanosomiasis (gambiense) ...	—	—	—	—
121.0	A 43	Trypanosomiasis (rhodesiense) ...	—	—	—	—
121.2	A 43	Other Unspecified Trypanoso- miasis ...	—	—	—	—
131	A 43	Dermatophytosis (Tinea) ...	—	—	—	—
135. N.O.S.	A 43	Scabies ...	1	24	—	—
036-122	A 43	Other infectious and protozoal diseases ...	—	1	—	—
N.O.S. 132-138	A 43	Other Parasitic Diseases ...	—	6	—	1
<i>New Growths</i>						
140-148	A 44	Malignant Neoplasm Mouth and Pharynx ...	—	—	—	—
150	A 45	Malignant Neoplasm of Oeso- phagus ...	—	—	—	—
151	A 46	Malignant Neoplasm of Stomach	—	2	—	—
152,153	A 47	Malignant Neoplasm of Intestine	—	—	—	—
154	A 48	Malignant Neoplasm of Rectum	—	1	—	—
161	A 49	Malignant Neoplasm of Larynx	—	—	—	—
162,163	A 50	Malignant Neoplasm of trachea, bronchus and lung not specified as secondary ...	—	1	—	—
170	A 51	Malignant Neoplasm of breast ...	—	1	—	—
171	A 52	Malignant Neoplasm of cervix uteri ...	—	1	—	—
Carried forward ...			181	1,419	79	206

Code	List No.	Diseases	Remaining in Hospital at end of Dec. 1952	Total cases	Deaths	Remaining in Hospital at end of Dec. 1953
		Brought forward ...	181	1,413	79	206
172-174	A 53	Malignant Neoplasm of other un- specified parts of uterus ...	—	2	—	—
177	A 54	Malignant Neoplasm of prostate	—	5	1	—
190,191	A 55	Malignant Neoplasm of skin ...	—	2	—	1
196,197	A 56	Malignant Neoplasm of bone and connected tissue ...	—	4	1	—
N.O.S. 155-199	A 57	Malignant Neoplasm of all other and unspecified sites ...	1	12	4	—
204	A 58	Leukaemia and Aleukaemia ...	—	—	—	—
200-203,205	A 59	Lymphosarcoma and other neo- plasm of lymphatic and haema- topoietic systems ...	—	—	—	—
210-239	A 60	Benign Neoplasms and unspecified neoplasms ...	—	88	4	5
<i>Allergic, Metabolic and Blood Diseases</i>						
250,251	A 61	Nontoxic goitre ...	—	—	—	—
252	A 62	Thyrotoxicosis ...	—	1	—	—
260	A 63	Diabetes Mellitus ...	—	19	1	—
280	A 64	Beriberi ...	—	2	—	—
281	A 64	Pellagra ...	—	—	—	—
282	A 64	Scurvy ...	—	—	—	—
286.6	A 64	Kwashiorker ...	—	3	1	—
283-286	A 64	Other Deficiency States ...	—	20	2	—
290	A 65	Pernicious and other hyperchromic anaemia ...	—	7	—	—
291	A 65	Iron deficiency anaemias ...	10	53	14	4
292,293	A 65	Other anaemias ...	1	40	9	2
241	A 66	Asthma ...	1	30	—	1
N.O.S. 240-299	A 66	Other allergic endocrine, metabolic and blood diseases ...	—	11	1	1
<i>Diseases of Nervous System and Sense Organs</i>						
300-309	A 67	Psychoses ...	149	83	12	156
310-324,326	A 68	Psychoneuroses and disorders of personality ...	—	4	—	1
325	A 69	Mental deficiency ...	—	3	—	—
330-334	A 70	Vascular lesions affecting central nervous system ...	1	5	1	—
340	A 71	Meningitis (except meningococcal and tuberculous) ...	—	5	5	—
345	A 72	Multiple sclerosis ...	—	—	—	—
353	A 73	Epilepsy ...	—	4	1	—
370-379	A 74	Inflammatory diseases of eye ...	1	18	—	2
385	A 75	Cataract ...	6	21	—	—
387	A 76	Glaucoma ...	—	1	—	—
390	A 77	Otitis externa ...	1	3	—	—
391-383	A 77	Otitis media and mastoiditis ...	1	15	—	1
394	A 77	Other inflammatory diseases of ear	—	7	—	—
N.O.S. 341-369	A 78	All other diseases of nervous system, sense organs and audi- tory system ...	—	23	—	—
395-398						
N.O.S. 380-389	A 78	All other diseases and conditions of eye ...	1	21	—	—
Carried forward ...			354	1,931	136	380

Code	List No.	Diseases	Remaining in Hospital at end of Dec. 1952	Total cases	Deaths	Remaining in Hospital at end of Dec. 1953
		Brought forward ...	354	1,931	136	380
		<i>Circulatory Diseases</i>				
400-402	A 79	Rheumatic Fever	—	3	—	—
410-416	A 80	Chronic rheumatic heart disease ...	—	1	—	—
420-422	A 81	Arteriosclerotic and degenerative heart disease	—	1	—	—
430-434	A 82	Other diseases of heart	9	34	8	—
440-443	A 83	Hypertension with heart disease	—	2	—	—
444-447	A 84	Hypertension without mention of heart	—	2	—	—
450-456	A 85	Diseases of arteries	—	6	1	2
460-468	A 86	Other diseases of circulatory sy- stem	—	62	21	—
		<i>Respiratory Diseases</i>				
470-475	A 87	Acute upper respiratory infections	1	33	2	—
480-483	A 88	Influenza	—	33	—	—
490	A 89	Lobar pneumonia	9	321	30	5
491	A 90	Bronchopneumonia	—	112	14	2
492,493	A 91	Primary atypical, other and un- specified pneumonia	—	11	—	—
500	A 92	Acute bronchitis	—	52	—	—
501,502	A 93	Bronchitis, chronic and unqualified.	—	17	—	—
510	A 94	Hypertrophy of tonsils and ade- noids	1	18	—	—
518,521	A 95	Empyema and abscess of lung ...	—	—	—	—
519	A 96	Pleurisy	—	27	1	—
523	A 97	Pneumoconiosis	—	—	—	—
N.O.S.						
511-527	A 97	All other respiratory diseases ...	3	52	5	1
		<i>Alimentary Diseases</i>				
530	A 98	Dental Caries	—	2	—	—
531-535	A 98	All other diseases of teeth and supporting structures	2	17	—	1
540	A 99	Ulcer of stomach	1	10	—	—
541	A 100	Ulcer of duodenum	—	7	1	—
543	A 101	Gastritis and duodenitis	—	13	—	—
550-553	A 102	Appendicitis	—	23	1	—
560,561,570	A 103	Intestinal obstruction and hernia	10	372	19	17
571.0	A 104	Gastro-enteritis and colitis be- tween 4 weeks and 2 years ...	—	11	4	—
571.1	A 104	Gastro-enteritis and colitis, ages 2 years and over	1	53	4	—
572	A 104	Chronic enteritis and ulcerative colitis	—	12	1	—
581	A 105	Cirrhosis of liver	1	16	5	3
584,585	A 106	Cholelithiasis and Cholecystitis ...	—	4	2	—
536-587	A 107	Other diseases of digestive system	7	136	9	2
		<i>Genito-Urinary Diseases</i>				
590	A 108	Acute nephritis	—	5	2	4
591-594	A 109	Chronic, other and unspecified nephritis	2	4	1	1
600	A 110	Infections of kidney	—	1	—	—
602,604	A 111	Calculi of urinary system	—	6	1	—
610	A 112	Hyperplasia of prostate	—	12	2	—
620,621	A 113	Diseases of breast	—	11	—	—
613	A 114	Hydrocele	4	162	—	1
634	A 114	Disorder of Menstruation	—	12	1	2
N.O.S.	A 114	Other diseases of genito-urinary system and male genital organs	10	200	14	7
601-617						
		Carried forward ...	415	3,807	285	428

Code	List No.	Diseases	Remaining in Hospital at end of Dec. 1952	Total cases	Deaths	Remaining in Hospital at end of Dec. 1953
		Brought forward ...	415	3,807	285	428
N.O.S. 622-637	A 114	Other diseases of uterus and female genital organs ...	4	125	—	3
<i>Diseases of Pregnancy Puerperium</i>						
640-641, 681,682,684	A 115	Sepsis of pregnancy, childbirth and the puerperium ...	—	—	—	—
642,652, 685,686	A 116	Toxaemias of pregnancy and the puerperium	—	12	—	—
643,644	A 117	Haemorrhage of pregnancy and childbirth ...	—	1	—	—
650	A 118	Abortion without mention of sepsis or toxaemia ...	1	52	1	—
650	A 119	Abortion with sepsis ...	—	9	—	—
660	A 120	Delivery without complication ...	4	427	1	16
N.O.S. 645-689	A 120	Other complications of pregnancy, childbirth and puerperium ...	—	62	19	3
<i>Skin and Musculo-Skeletal Diseases</i>						
690-689	A 121	Infections of skin and subcutaneous tissue ...	15	275	6	9
720-725	A 122	Arthritis and spondylitis ...	1	52	—	1
726,727	A 123	Muscular rheumatism and rheumatism unspecified ...	—	13	—	—
730	A 124	Osteomyelitis and periostitis ...	—	8	1	—
737,745,749	A 125	Ankylosis and acquired musculo-skeletal deformities ...	—	1	—	—
715	A 126	Chronic ulcer of skin ...	30	674	1	40
700-714,716	A 126	All other diseases of skin ...	2	128	2	—
731-736, 738-744	A 126	All other diseases of musculo-skeletal system ...	14	62	3	—
751	A 127	Spina bifida and meningocele ...	—	—	—	—
754	A 128	Congenital malformations of circulatory system ...	—	2	—	—
N.O.S. 750-759	A 129	Other congenital malformations ...	1	4	1	—
<i>Diseases of Newborn</i>						
760-761	A 130	Birth injuries ...	—	—	7	—
762	A 131	Postnatal asphyxia and atelectasis ...	—	—	—	—
764	A 132	Diarrhoea of newborn (under 4 weeks) ...	—	—	—	—
765	A 132	Ophthalmia neonatorum ...	—	2	—	—
763,766,768	A 132	Other infections of newborn ...	—	1	—	—
770	A 133	Haemolytic disease of newborn ...	—	—	—	—
769,771,772	A 134	All other defined diseases of early infancy ...	—	—	—	—
773,776	A 135	Ill-defined diseases peculiar to early infancy, and immaturity unqualified ...	—	—	—	—
<i>Ill-Defined Diseases</i>						
794	A 136	Senility without mention of Psychosis ...	3	31	11	1
788.8	A 137	Pyrexia of unknown origin ...	2	148	8	1
793	A 137	Observation, without need for further medical care ...	—	20	—	1
N.O.S. 780-795	A 137	All other ill-defined causes of morbidity ...	16	17	—	—
Carried forward ...			508	5,933	346	503

Code	List No.	Diseases	Remaining in Hospital at end of Dec. 1952	Total cases	Deaths	Remaining in Hospital at end of Dec. 1953
		<i>Injuries</i>	508	5,933	346	503
N800-N804	AN 138	Fracture of skull	—	4	1	—
N805-N809	AN 139	Fracture of spine and trunk ...	3	43	7	2
N810-N829	AN 140	Fracture of limbs	4	95	3	6
N830-N839	AN 141	Dislocation without fracture ...	—	11	1	—
N840-N848	AN 142	Sprains and strains of joints and adjacent muscle	—	20	—	—
N850-N856	AN 143	Head injury (excluding fracture)	—	10	1	1
N860-N869	AB 144	Internal injury of chest, abdomen, and pelvis	—	—	—	—
N870-N908	AN 145	Laceration and open wounds ...	8	156	2	7
N910-N929	AN 146	Superficial injury, contusion and crushing with intact skin surface	1	67	—	—
N930-N936	AN 147	Effects of foreign body entering through orifice	—	5	—	—
N940-N949	AN 148	Burns	3	49	7	1
N960-N979	AN 149	Effects of poisons	—	10	2	—
N950-N959	AN 150	All other and unspecified effects of external causes	—	478	3	4
Total ...			527	6,881	373	524

N.O.S. means “Not Otherwise Specified”, i.e. N.O.S. 102-108 means all other diseases included between these numbers in the International Classification to be entered in this line if not otherwise specified in any line elsewhere.

Code	Disease	
	<i>Infectious and Parasitic Diseases</i>	
001-008	Respiratory Tuberculosis	214
010-019	Other Tuberculosis	22
020-029	Syphilis	901
030-035	Gonorrhoea	1,550
036-039	Other Venereal Diseases	658
045	Bacillary Dysentery	323
046	Amoebic Dysentery	68
055	Diphtheria	2
056	Whooping Cough	167
057,340	Meningitis (Excluding Tuberculosis)	—
058	Plague	—
060	Leprosy	24
061	Tetanus	5
062	Anthrax	—
071	Relapsing Fever	—
073	Yaws	11,133
080	Acute Poliomyelitis	6
084	Variola major	—
084	Variola minor	1
085	Measles	178
086	Rubella	4
087	Chicken Pox	113
089	Mumps	200
092	Infectious Hepatitis	523
095	Trachoma	26
110	B.T. Malaria	1,050
111	Qt. Malaria	782
112	S.T. Malaria	3,942
113-117	Other forms of Malaria	2,299
115	Blackwater	2
121	Trypanosomiasis	—
123.0	Schistosomiasis (haematobium)	1,217
123.1	Schistosomiasis (mansoni)	98
126	Tapeworm	27
127	Onchocerciasis	—
129	Ankylostomiasis	8,729
130.0	Ascariasis	331
131	Tinea	233
135	Scabies	2,951
N.O.S.		
036.138	Other infective and parasitic diseases	473
	<i>New Growths</i>	
140-205	Malignant Neoplasms	87
210-239	Benign and other Neoplasms	368
	<i>Allergic Metabolic and Blood Diseases</i>	
241	Asthma	928
286.6	Kwashiorkor	—
290-293	Anaemia	5,295
N.O.S.		
240-299	Other allergic, endocrine, metabolic and nutritional diseases	837
	<i>Diseases of Nervous System and Sense Organs</i>	
300-326	Mental Disorder	17
353	Epilepsy	6
N.O.S.	Other diseases of the nervous system and sense organs	1,142
330-369		
	Carried forward ...	46,932

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OFFICE OF THE
DIRECTOR OF MEDICAL SERVICES,
HEALTH DÉPARTMENT,
ZANZIBAR,

25th February, 1955

Sir,

I have the honour to submit for the information of His Excellency the British Resident and for transmission to the Right Honourable the Secretary of State, The Medical Report on the Health and Sanitation conditions of the Zanzibar Protectorate for the year 1954.

I have the honour to be,

Sir,

Your obedient servant,

R. H. PURNELL,
Acting Director of Medical Services,
Health Department

THE HONOURABLE

THE CHIEF SECRETARY TO THE GOVERNMENT,

ZANZIBAR.

